

## **Statement 11**

September 30, 2016

Statement By: Kevin Mottus, California Brain Tumor Association

See Study in Attachments

I am strongly opposed to the FCC plan to rollout and auction 5G spectrum technology due to the non-thermal biological health effects created by radiofrequency/microwave radiation or electromagnetic fields (EMF) emitted by wireless transmitters. These documented effects are not recognized and not protected by our current FCC safety standards.

A study that was done on the effects of weak radiofrequency radiation from mobile phones on plants came had the following results:

“Our analysis demonstrates that the data from a substantial amount of the studies on RF-EMFs from mobile phones show physiological and/or morphological effects (89.9%,  $p < 0.001$ ). Additionally, our analysis of the results from these reported studies demonstrates that the maize, roselle, pea, fenugreek, duckweeds, tomato, onions and mungbean plants seem to be very sensitive to RF-EMFs. Our findings also suggest that plants seem to be more responsive to certain frequencies, especially the frequencies between (i) 800 and 1500 MHz ( $p < 0.0001$ ), (ii) 1500 and 2400 MHz ( $p < 0.0001$ ) and (iii) 3500 and 8000 MHz ( $p = 0.0161$ ).”

I am strongly opposed to the FCC plan to rollout and auction 5G spectrum technology due to the non-thermal biological health effects created by radiofrequency/microwave radiation or electromagnetic fields (EMF) emitted by wireless transmitters. These documented effects are not recognized and not protected by our current FCC safety standards. MD and PhD experts, in the field of wireless microwave radiation health effects, warn us of the serious harm that microwave technology especially 5G along with its required deployment of multiple transmitters, will cause. We ask that you abort your plan to auction 5G spectrum and immediately halt the rollout of 5G technology testing. We need to immediately institute safety standards that take into account non-thermal biological health effects. The

research attached and cited shows that, at the power levels required for this technology to operate reliably over the project's large areas, the radiofrequency/microwave radiation will have significant biological health effects, especially on electrohypersensitive individuals and children (Cancer, Neurological effects, immune system disorders, reproductive harm and others). **We are asking that you focus instead on installing only fiber optic wired connection to the Internet along with individualized subsidies to help poor people pay for wired/cabled connection to the Internet. Fiber optic wired connections eliminates wireless microwave radiation transmissions thus eliminating wireless microwave radiation health effects. In addition we insist on instituting RF Exposure standards significantly lower than our current thermal standards as recommended and supported by the Bioinitiative Report ([Bioinitiative.org/conclusions](http://Bioinitiative.org/conclusions)) of 0.0003 microWatts per centimeter squared.**

Kevin Mottus California Brain Tumor Association